

## CLAIMS:

1. A transmission system comprising at least one primary station (2) being coupled via a transmission medium (14) to at least one secondary station (4), the secondary station (4) comprising data transmission request means (36,42,44) for transmitting a data transmission request (70) to the primary station (2) when transmission data are available in the secondary station (4), characterised in that the primary station (2) comprises transmission means (20,22,26) for transmitting, upon receipt of the data transmission request (70), a data transmission refusal (72) followed by a data transmission grant (74) to the secondary station (4), the primary station (2) comprising monitoring means (22,28) for monitoring the transmission of data (76) by the secondary station (2) in response to the data transmission grant (74).
2. The transmission system according to claim 1, characterised in that the transmission system comprises a CATV system, wherein the primary station (2) comprises a cable modem termination system and wherein the secondary station (4) comprises a cable modem.
3. The transmission system according to claim 2, characterised in that the CATV system and the cable modem termination system and the cable modem are DVB-compliant.
4. The transmission system according to claim 3, characterised in that the data transmission refusal (72) comprises a reservation grant message with a remaining\_slot\_count and a grant\_slot\_count, wherein the remaining\_slot\_count is equal to zero and wherein the grant\_slot\_count is equal to zero.
5. The transmission system according to claim 4, characterised in that the data transmission grant (74) comprises a further reservation grant message with a further remaining\_slot\_count and a further grant\_slot\_count, wherein the further remaining\_slot\_count is equal to zero and wherein the further grant\_slot\_count is equal to or larger than one.

6. The transmission system according to claim 2, characterised in that the CATV system and the cable modem termination system and the cable modem are IEEE 802.14-compliant.

7. The transmission system according to claim 1, characterised in that the transmission system comprises a satellite communication system, wherein the primary station comprises a ground station and wherein the secondary station comprises a satellite receiver.

8. The transmission system according to claim 7, characterised in that the satellite communication system is DVB-compliant.

9. A primary station (2) comprising receiving means (22,24,28) for receiving a data transmission request (70) from a secondary station (4), characterised in that the primary station (2) comprises transmission means (20,22,26) for transmitting, upon receipt of the data transmission request (70), a data transmission refusal (72) followed by a data transmission grant (74) to the secondary station (4), the primary station (2) comprising monitoring means (22,28) for monitoring the transmission of data (76) by the secondary station (4) in response to the data transmission grant (74).

10. The primary station (2) according to claim 9, characterised in that the primary station (2) comprises a cable modem termination system.

11. The primary station (2) according to claim 10, characterised in that the cable modem termination system is DVB-compliant.

12. The primary station (2) according to claim 11, characterised in that the data transmission refusal (72) comprises a reservation grant message with a remaining\_slot\_count and a grant\_slot\_count, wherein the remaining\_slot\_count is equal to zero and wherein the grant\_slot\_count is equal to zero.

13. The primary station (2) according to claim 12, characterised in that the data transmission grant (74) comprises a further reservation grant message with a further remaining\_slot\_count and a further grant\_slot\_count, wherein the further

remaining\_slot\_count is equal to zero and wherein the further grant\_slot\_count is equal to or larger than one.

14. A method of determining whether a secondary station (4) can process

unsolicited data transmission grants (74), the method comprising receiving a data transmission request (70) from the secondary station (4) when transmission data are available in the secondary station (4), characterised in that the method further comprises:

- transmitting, upon receipt of the data transmission request (70), a data transmission refusal (72) followed by a data transmission grant (74) to the secondary station (4),
- monitoring the transmission of data (76) by the secondary station (4) in response to the data transmission grant (74).

15. The method according to claim 14, characterised in that the secondary station (4) comprises a cable modem.

16. The method according to claim 15, characterised in that the cable modem is DVB-compliant.

17. The method according to claim 16, characterised in that the data transmission refusal (72) comprises a reservation grant message with a remaining\_slot\_count and a grant\_slot\_count, wherein the remaining\_slot\_count is equal to zero and wherein the grant\_slot\_count is equal to zero.

18. The method according to claim 17, characterised in that the data transmission grant (74) comprises a further reservation grant message with a further remaining\_slot\_count and a further grant\_slot\_count, wherein the further remaining\_slot\_count is equal to zero and wherein the further grant\_slot\_count is equal to or larger than one.